



SEQUENCE LISTING

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<110> Einat, et al

<120> GENES ASSOCIATED WITH MECHANICAL STRESS, EXPRESSION PRODUCTS THEREFROM, AND USES THEREOF

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<140> 09/905,129

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<151> 2001-03-08

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<151> 2000-05-30

<150> 60/084,944

<151> 1998-05-11

<150> 60/085,673

<151> 1998-05-15

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<170> PatentIn version 3.0

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<212> DNA

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<222> (1)..(8883)

<223> 'n' can be any nucleotide 'a', 'c', 'g' or 't'.

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 <223> 'n' can be any nucleotide 'a', 'c', 'g' or 't'.

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25


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 ctcaggagct tgacccgggt gcacctggat cacaacaaca ttgagtttat caaccccag 480
 gcgttttacg gactcacctt gctccgcttg gtacatctag aaggaaaccg gctgacaaag 540
 ctccatccag acacatttgt ctctttgagc tatctccaga tattttaaacc ctcccttcatt 600
 aagnacctgt acttgatga taacttcatt gacctccctc ccaaaagaaa tgggtctctc 660
 tatgccaacc ctagaaagcc tttacttgca tggaaaccca tggacctgtg actgccattt 720
 aaagtgggtg tccgagtga tgcagggaaa cccaggtaac tatcttgttt gtttgtttct 780
 tttttttatar kacgtatttt cctcaatttc atttagaatg atatcccaaa agtcccccat 840
 aacctcccc ccacttcctt acctacccat tcccattttt tggccctggc attcccc 897

<210> 10
 <211> 2597
 <212> PRT
 <213> Rattus sp.

<220>
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 <222> (1)..(2597)
 <223> 'x' can be any amino acid

<400> 10

Met	Gln	Val	Arg	Gly	Arg	Glu	Val	Ser	Gly	Leu	Leu	Ile	Ser	Leu	Thr
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Ala	Val	Cys	Leu	Val	Val	Thr	Pro	Gly	Ser	Arg	Ala	Cys	Pro	Arg	Arg
			20					25					30		
Cys	Ala	Cys	Tyr	Val	Pro	Thr	Glu	Val	His	Cys	Thr	Phe	Arg	Tyr	Leu
			35				40					45			

Met Leu Asn Ala Ser Phe Ser Thr Asn Leu Val Cys Ser Val Asp Tyr
 355 360 365

Asn His Ile Gln Pro Val Trp Gln Leu Leu Ala Leu Tyr Ser Asp Ser
 370 375 380

Pro Leu Ile Leu Glu Arg Lys Pro Gln Leu Thr Glu Thr Pro Ser Leu
 385 390 395 400

Ser Ser Arg Tyr Lys Gln Val Ala Leu Arg Pro Glu Asp Ile Phe Thr
 405 410 415

Ser Ile Glu Ala Asp Val Arg Ala Asp Pro Phe Trp Phe Gln Gln Glu
 420 425 430

Lys Ile Val Leu Gln Leu Asn Arg Thr Ala Thr Thr Leu Ser Thr Leu
 435 440 445

Gln Ile Gln Phe Ser Thr Asp Ala Gln Ile Ala Leu Pro Arg Ala Glu
 450 455 460

Met Arg Ala Glu Arg Leu Lys Trp Thr Met Ile Leu Met Met Asn Asn
 465 470 475 480

Pro Lys Leu Glu Arg Thr Val Leu Val Gly Gly Thr Ile Ala Leu Ser
 485 490 495

Cys Pro Gly Lys Gly Asp Pro Ser Pro His Leu Glu Trp Leu Leu Ala
 500 505 510

Asp Gly Ser Lys Val Arg Ala Pro Tyr Val Ser Glu Asp Gly Arg Ile
 515 520 525

Leu Ile Asp Lys Asn Gly Lys Leu Glu Leu Gln Met Ala Asp Ser Phe
 530 535 540

Asp Ala Gly Leu Tyr His Cys Ile Ser Thr Asn Asp Ala Asp Ala Asp
 545 550 555 560

Val Leu Thr Tyr Arg Ile Thr Val Val Glu Pro Tyr Gly Glu Ser Thr
 565 570 575

His Asp Ser Gly Val Gln His Thr Val Val Thr Gly Glu Thr Leu Asp
 580 585 590

Leu Pro Cys Leu Ser Thr Gly Val Pro Asp Ala Ser Ile Ser Trp Ile
 595 600 605

Leu Pro Gly Asn Thr Val Phe Ser Gln Pro Ser Arg Asp Arg Gln Ile
 610 615 620

Leu Asn Asn Gly Thr Leu Arg Ile Leu Gln Val Thr Pro Lys Asp Gln
 625 630 635 640

Gly His Tyr Gln Cys Val Ala Ala Asn Pro Ser Gly Ala Asp Phe Ser
 645 650 655

0000540-012200
202210 021500

Lys Pro Gln Asn Ser Lys Trp	Lys Pro Ser Pro Trp	Pro Glu His
1535	1540	1545
Lys Tyr Gln Leu Lys Ser Tyr	Ser Glu Thr Ile Glu	Lys Gly Lys
1550	1555	1560
Arg Pro Ala Val Ser Met Ser	Pro His Leu Ser Leu	Pro Glu Ala
1565	1570	1575
Ser Thr His Ala Ser His Trp	Asn Thr Gln Lys His	Ala Glu Lys
1580	1585	1590
Ser Val Phe Asp Lys Lys Pro	Gly Gln Asn Pro Thr	Ser Lys His
1595	1600	1605
Leu Pro Tyr Val Ser Leu Pro	Lys Thr Leu Leu Lys	Lys Pro Arg
1610	1615	1620
Ile Ile Gly Gly Lys Ala Ala	Ser Phe Thr Val Pro	Ala Asn Ser
1625	1630	1635
Asp Val Phe Leu Pro Cys Glu	Ala Val Gly Asp Pro	Leu Pro Ile
1640	1645	1650
Ile His Trp Thr Arg Val Ser	Ser Gly Xaa Glu Ile	Ser Gln Gly
1655	1660	1665
Thr Gln Lys Ser Arg Phe His	Val Leu Pro Asn Gly	Thr Leu Ser
1670	1675	1680
Ile Gln Arg Val Ser Ile Gln	Asp Arg Gly Gln Tyr	Leu Cys Ser
1685	1690	1695
Ala Phe Asn Pro Leu Gly Val	Asp His Phe His Val	Ser Leu Ser
1700	1705	1710
Val Val Phe Tyr Pro Ala Arg	Ile Leu Asp Arg His	Val Lys Glu
1715	1720	1725
Ile Thr Val His Phe Gly Ser	Thr Val Glu Leu Lys	Cys Arg Val
1730	1735	1740
Glu Gly Met Pro Arg Pro Thr	Val Ser Trp Ile Leu	Ala Asn Gln
1745	1750	1755
Thr Val Val Ser Glu Thr Ala	Lys Gly Ser Arg Lys	Val Trp Val
1760	1765	1770
Thr Pro Asp Gly Thr Leu Ile	Ile Tyr Asn Leu Ser	Leu Tyr Asp
1775	1780	1785
Arg Gly Phe Tyr Lys Cys Val	Ala Ser Asn Pro Ser	Gly Gln Asp
1790	1795	1800
Ser Leu Leu Val Lys Ile Gln	Val Ile Thr Ala Pro	Pro Val Ile
1805	1810	1815

00005430 01200

1	5	10	15
Val Ile Cys Leu Val Ala Thr Pro Gly Gly Lys Ala Cys Pro Arg Arg	20	25	30
Cys Ala Cys Tyr Met Pro Thr Glu Val His Cys Thr Phe Arg Tyr Leu	35	40	45
Thr Ser Ile Pro Asp Ser Ile Pro Pro Asn Val Glu Arg Ile Asn Leu	50	55	60
Gly Tyr Asn Ser Leu Val Arg Leu Met Glu Thr Asp Phe Ser Gly Leu	65	70	75
Thr Lys Leu Glu Leu Leu Met Leu His Ser Asn Gly Ile His Thr Ile	85	90	95
Pro Asp Lys Thr Phe Ser Asp Leu Gln Ala Leu Gln Val Leu Lys Met	100	105	110
Ser Tyr Asn Lys Val Arg Lys Leu Gln Lys Asp Thr Phe Tyr Gly Leu	115	120	125
Arg Ser Leu Thr Arg Leu His Met Asp His Asn Asn Ile Glu Phe Ile	130	135	140
Asn Pro Glu Val Phe Tyr Gly Leu Asn Phe Leu Arg Leu Val His Leu	145	150	155
Glu Gly Asn Gln Leu Thr Lys Leu His Pro Asp Thr Phe Val Ser Leu	165	170	175
Ser Tyr Leu Gln Ile Phe Lys Ile Ser Phe Ile Lys Phe Leu Tyr Leu	180	185	190
Ser Asp Asn Phe Leu Thr Ser Leu Pro Gln Glu Met Val Ser Tyr Met	195	200	205
Pro Asp Leu Asp Ser Leu Tyr Leu His Gly Asn Pro Trp Thr Cys Asp	210	215	220
Cys His Leu Lys Trp Leu Ser Asp Trp Ile Gln Pro Asp Val Ile Lys	225	230	235
Cys Lys Lys Asp Arg Ser Pro Ser Ser Ala Gln Gln Cys Pro Leu Cys	245	250	255
Met Asn Pro Arg Thr Ser Lys Gly Lys Pro Leu Ala Met Val Ser Ala	260	265	270
Ala Ala Phe Gln Cys Ala Lys Pro Thr Ile Asp Ser Ser Leu Lys Ser	275	280	285
Lys Ser Leu Thr Ile Leu Glu Asp Ser Ser Ser Ala Phe Ile Ser Pro	290	295	300
Gln Gly Phe Met Ala Pro Phe Gly Ser Leu Thr Leu Asn Met Thr Asp			

Asn Gln His Lys Val Ser Leu Gln Lys Ser Thr Ala Val Met Leu	1220	1225	1230
Pro Lys Thr Ser Pro Ala Leu Pro Gln Arg Gln Ser Ser Pro Phe	1235	1240	1245
His Phe Thr Thr Leu Ser Thr Ser Val Met Gln Ile Pro Ser Asn	1250	1255	1260
Thr Leu Thr Thr Ala His His Thr Thr Thr Lys Thr His Asn Pro	1265	1270	1275
Gly Ser Leu Pro Thr Lys Lys Glu Leu Pro Phe Pro Pro Leu Asn	1280	1285	1290
Pro Met Leu Pro Ser Ile Ile Ser Lys Asp Ser Ser Thr Lys Ser	1295	1300	1305
Ile Ile Ser Thr Gln Thr Ala Ile Pro Ala Thr Thr Pro Thr Phe	1310	1315	1320
Pro Ala Ser Val Ile Thr Tyr Glu Thr Gln Thr Glu Arg Ser Arg	1325	1330	1335
Ala Gln Thr Ile Gln Arg Glu Gln Glu Pro Gln Lys Lys Asn Arg	1340	1345	1350
Thr Asp Pro Asn Ile Ser Pro Asp Gln Ser Ser Gly Phe Thr Thr	1355	1360	1365
Pro Thr Ala Met Thr Pro Pro Ala Leu Ala Phe Thr His Ser Pro	1370	1375	1380
Pro Glu Asn Thr Thr Gly Ile Ser Ser Thr Ile Ser Phe His Ser	1385	1390	1395
Arg Thr Leu Asn Leu Thr Asp Val Ile Glu Glu Leu Ala Gln Ala	1400	1405	1410
Ser Thr Gln Thr Leu Lys Ser Thr Ile Ala Ser Glu Thr Thr Leu	1415	1420	1425
Ser Ser Lys Ser His Gln Ser Thr Thr Thr Arg Lys Ala Ser Leu	1430	1435	1440
Asp Thr Pro Ile Pro Pro Phe Leu Ser Ser Ser Ala Thr Leu Met	1445	1450	1455
Pro Val Pro Ile Ser Pro Pro Phe Thr Gln Arg Ala Val Thr Asp	1460	1465	1470
Thr Arg Gly Asp Ser His Phe Arg Leu Met Thr Asn Thr Val Val	1475	1480	1485
Lys Leu His Glu Ser Ser Arg His Asn Leu Gln Met Pro Ser Ser			

1490						1495					1500				
Gln	Leu	Glu	Pro	Leu	Thr	Ser	Ser	Thr	Ser	Asn	Leu	Leu	His	Ser	
1505						1510					1515				
Thr	Pro	Met	Pro	Ala	Leu	Thr	Thr	Val	Lys	Ser	Gln	Asn	Ser	Lys	
1520						1525					1530				
Leu	Thr	Pro	Ser	Pro	Trp	Ala	Glu	Tyr	Gln	Phe	Trp	His	Lys	Pro	
1535						1540					1545				
Tyr	Ser	Asp	Ile	Ala	Glu	Lys	Gly	Lys	Lys	Pro	Glu	Val	Ser	Met	
1550						1555					1560				
Leu	Ala	Thr	Thr	Gly	Leu	Ser	Glu	Ala	Thr	Thr	Leu	Val	Ser	Asp	
1565						1570					1575				
Trp	Asp	Gly	Gln	Lys	Asn	Thr	Lys	Lys	Ser	Asp	Phe	Asp	Lys	Lys	
1580						1585					1590				
Pro	Val	Gln	Glu	Ala	Thr	Thr	Ser	Lys	Leu	Leu	Pro	Phe	Asp	Ser	
1595						1600					1605				
Leu	Ser	Arg	Tyr	Ile	Phe	Glu	Lys	Pro	Arg	Ile	Val	Gly	Gly	Lys	
1610						1615					1620				
Ala	Ala	Ser	Phe	Thr	Ile	Pro	Ala	Asn	Ser	Asp	Ala	Phe	Leu	Pro	
1625						1630					1635				
Cys	Glu	Ala	Val	Gly	Asn	Pro	Leu	Pro	Thr	Ile	His	Trp	Thr	Arg	
1640						1645					1650				
Val	Ser	Gly	Leu	Asp	Leu	Ser	Arg	Gly	Asn	Gln	Asn	Ser	Arg	Val	
1655						1660					1665				
Gln	Val	Leu	Pro	Asn	Gly	Thr	Leu	Ser	Ile	Gln	Arg	Val	Glu	Ile	
1670						1675					1680				
Gln	Asp	Arg	Gly	Gln	Tyr	Leu	Cys	Ser	Ala	Ser	Asn	Leu	Phe	Gly	
1685						1690					1695				
Thr	Asp	His	Leu	His	Val	Thr	Leu	Ser	Val	Val	Ser	Tyr	Pro	Pro	
1700						1705					1710				
Arg	Ile	Leu	Glu	Arg	Arg	Thr	Lys	Glu	Ile	Thr	Val	His	Ser	Gly	
1715						1720					1725				
Ser	Thr	Val	Glu	Leu	Lys	Cys	Arg	Ala	Glu	Gly	Arg	Pro	Ser	Pro	
1730						1735					1740				
Thr	Val	Thr	Trp	Ile	Leu	Ala	Asn	Gln	Thr	Val	Val	Ser	Glu	Ser	
1745						1750					1755				
Ser	Gln	Gly	Ser	Arg	Gln	Ala	Val	Val	Thr	Val	Asp	Gly	Thr	Leu	
1760						1765					1770				
Val	Leu	His	Asn	Leu	Ser	Ile	Tyr	Asp	Arg	Gly	Phe	Tyr	Lys	Cys	

Gly Val 2075	Ala Glu Glu Gly 2075	Asp 2080	Tyr Thr Cys Tyr 2085	Ala 2085	Gln Asn Thr
Leu Gly 2090	Lys Asp Glu Met 2095	Lys 2095	Val His Leu Thr 2100	Val 2100	Ile Thr Ala
Ala Pro 2105	Arg Ile Arg Gln 2110	Ser 2110	Asn Lys Thr Asn 2115	Lys 2115	Arg Ile Lys
Ala Gly 2120	Asp Thr Ala Val 2125	Leu 2125	Asp Cys Glu Val 2130	Thr 2130	Gly Asp Pro
Lys Pro 2135	Lys Ile Phe Trp 2140	Leu 2140	Leu Pro Ser Asn 2145	Asp 2145	Met Ile Ser
Phe Ser 2150	Ile Asp Arg Tyr 2155	Thr 2155	Phe His Ala Asn 2160	Gly 2160	Ser Leu Thr
Ile Asn 2165	Lys Val Lys Leu 2170	Leu 2170	Asp Ser Gly Glu 2175	Tyr 2175	Val Cys Val
Ala Arg 2180	Asn Pro Ser Gly 2185	Asp 2185	Asp Thr Lys Met 2190	Tyr 2190	Lys Leu Asp
Val Val 2195	Ser Lys Pro Pro 2200	Leu 2200	Ile Asn Gly Leu 2205	Tyr 2205	Thr Asn Arg
Thr Val 2210	Ile Lys Ala Thr 2215	Ala 2215	Val Arg His Ser 2220	Lys 2220	Lys His Phe
Asp Cys 2225	Arg Ala Glu Gly 2230	Thr 2230	Pro Ser Pro Glu 2235	Val 2235	Met Trp Ile
Met Pro 2240	Asp Asn Ile Phe 2245	Leu 2245	Thr Ala Pro Tyr 2250	Tyr 2250	Gly Ser Arg
Ile Thr 2255	Val His Lys Asn 2260	Gly 2260	Thr Leu Glu Ile 2265	Arg 2265	Asn Val Arg
Leu Ser 2270	Asp Ser Ala Asp 2275	Phe 2275	Ile Cys Val Ala 2280	Arg 2280	Asn Glu Gly
Gly Glu 2285	Ser Val Leu Val 2290	Val 2290	Gln Leu Glu Val 2295	Leu 2295	Glu Met Leu
Arg Arg 2300	Pro Thr Phe Arg 2305	Asn 2305	Pro Phe Asn Glu 2310	Lys 2310	Ile Val Ala
Gln Leu 2315	Gly Lys Ser Thr 2320	Ala 2320	Leu Asn Cys Ser 2325	Val 2325	Asp Gly Asn
Pro Pro 2330	Pro Glu Ile Ile 2335	Trp 2335	Ile Leu Pro Asn 2340	Gly 2340	Thr Arg Phe
Ser Asn	Gly Pro Gln Ser Tyr	Gln Tyr Leu Ile Ala	Ser Asn Gly		

2345	2350	2355
Ser Phe Ile Ile Ser Lys Thr Thr Arg Glu Asp Ala Gly Lys Tyr		
2360	2365	2370
Arg Cys Ala Ala Arg Asn Lys Val Gly Tyr Ile Glu Lys Leu Val		
2375	2380	2385
Ile Leu Glu Ile Gly Gln Lys Pro Val Ile Leu Thr Tyr Ala Pro		
2390	2395	2400
Gly Thr Val Lys Gly Ile Ser Gly Glu Ser Leu Ser Leu His Cys		
2405	2410	2415
Val Ser Asp Gly Ile Pro Lys Pro Asn Ile Lys Trp Thr Met Pro		
2420	2425	2430
Ser Gly Tyr Val Val Asp Arg Pro Gln Ile Asn Gly Lys Tyr Ile		
2435	2440	2445
Leu His Asp Asn Gly Thr Leu Val Ile Lys Glu Ala Thr Ala Tyr		
2450	2455	2460
Asp Arg Gly Asn Tyr Ile Cys Lys Ala Gln Asn Ser Val Gly His		
2465	2470	2475
Thr Leu Ile Thr Val Pro Val Met Ile Val Ala Tyr Pro Pro Arg		
2480	2485	2490
Ile Thr Asn Arg Pro Pro Arg Ser Ile Val Thr Arg Thr Gly Ala		
2495	2500	2505
Ala Phe Gln Leu His Cys Val Ala Leu Gly Val Pro Lys Pro Glu		
2510	2515	2520
Ile Thr Trp Glu Met Pro Asp His Ser Leu Leu Ser Thr Ala Ser		
2525	2530	2535
Lys Glu Arg Thr His Gly Ser Glu Gln Leu His Leu Gln Gly Thr		
2540	2545	2550
Leu Val Ile Gln Asn Pro Gln Thr Ser Asp Ser Gly Ile Tyr Lys		
2555	2560	2565
Cys Thr Ala Lys Asn Pro Leu Gly Ser Asp Tyr Ala Ala Thr Tyr		
2570	2575	2580
Ile Gln Val		
2585		

<210> 12
 <211> 236
 <212> PRT
 <213> Mus musculus
 <220>
 <221> misc_feature

<222> (1)..(236)
 <223> 'x' can be any amino acid

<400> 12

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Ala	Ile	Cys	Leu	Val	Val	Thr	Pro	Gly	Ser	Arg	Val	Cys	Pro	Arg	Arg
			20					25					30		
Cys	Ala	Cys	Tyr	Val	Pro	Thr	Glu	Val	His	Cys	Thr	Phe	Arg	Asp	Leu
		35					40					45			
Thr	Ser	Ile	Pro	Asp	Gly	Pro	Ala	Asn	Val	Glu	Arg	Val	Asn	Leu	Gly
	50					55					60				
Tyr	Asn	Ser	Leu	Thr	Arg	Leu	Thr	Glu	Asn	Asp	Phe	Ser	Gly	Leu	Ser
65					70					75				80	
Arg	Leu	Glu	Leu	Leu	Met	Leu	His	Ser	Asn	Gly	Ile	His	Arg	Val	Ser
				85					90					95	
Asp	Lys	Thr	Phe	Ser	Gly	Leu	Gln	Ser	Leu	Gln	Val	Leu	Lys	Met	Ser
			100					105					110		
Tyr	Asn	Lys	Val	Gln	Ile	Ile	Glu	Lys	Asp	Thr	Leu	Tyr	Gly	Leu	Arg
		115					120						125		
Ser	Leu	Thr	Arg	Leu	His	Leu	Asp	His	Asn	Asn	Ile	Glu	Phe	Ile	Asn
	130					135					140				
Pro	Glu	Ala	Phe	Tyr	Gly	Leu	Thr	Leu	Leu	Arg	Leu	Val	His	Leu	Glu
145					150					155				160	
Gly	Asn	Arg	Leu	Thr	Lys	Leu	His	Pro	Asp	Thr	Phe	Val	Ser	Leu	Ser
			165						170					175	
Tyr	Leu	Gln	Ile	Phe	Lys	Thr	Ser	Phe	Ile	Lys	Xaa	Leu	Tyr	Leu	Tyr
		180						185					190		
Asp	Asn	Phe	Thr	Ser	Leu	Pro	Lys	Glu	Met	Val	Ser	Ser	Met	Pro	Asn
		195					200					205			
Leu	Glu	Ser	Leu	Tyr	Leu	His	Gly	Asn	Pro	Trp	Thr	Cys	Asp	Cys	His
	210					215					220				
Leu	Lys	Trp	Leu	Ser	Glu	Trp	Met	Gln	Gly	Asn	Pro				
225					230					235					

<210> 13
 <211> 2597
 <212> PRT
 <213> Rattus sp.

<220>

00005120-013200

[illegible]

66

000000-010000

Lys Asp 1175	Ser Val Glu Thr Thr	Pro Leu Pro Ser Pro	Leu Ser Thr 1185
Pro Ser 1190	Ile Pro Thr Ser Thr	Lys Phe Ser Lys Arg	Lys Thr Pro 1200
Leu His 1205	Gln Ile Phe Val Asn	Asn Gln Lys Lys Glu	Gly Met Leu 1215
Lys Asn 1220	Pro Tyr Gln Phe Gly	Leu Gln Lys Asn Pro	Ala Ala Lys 1230
Leu Pro 1235	Lys Ile Ala Pro Leu	Leu Pro Thr Gly Gln	Ser Ser Pro 1245
Ser Asp 1250	Ser Thr Thr Leu Leu	Thr Ser Pro Pro Pro	Ala Leu Ser 1260
Thr Thr 1265	Met Ala Ala Thr Gln	Asn Lys Gly Thr Glu	Val Val Ser 1275
Gly Ala 1280	Arg Ser Leu Ser Ala	Gly Lys Lys Gln Pro	Phe Thr Asn 1290
Ser Ser 1295	Pro Val Leu Pro Ser	Thr Ile Ser Lys Arg	Ser Asn Thr 1305
Leu Asn 1310	Phe Leu Ser Thr Glu	Thr Pro Thr Val Thr	Ser Pro Thr 1320
Ala Thr 1325	Ala Ser Val Ile Met	Ser Glu Thr Gln Arg	Thr Arg Ser 1335
Lys Glu 1340	Ala Lys Asp Gln Ile	Lys Gly Pro Arg Lys	Asn Arg Asn 1350
Asn Ala 1355	Asn Thr Thr Pro Arg	Gln Val Ser Gly Tyr	Ser Ala Tyr 1365
Ser Ala 1370	Leu Thr Thr Ala Asp	Thr Pro Leu Ala Phe	Ser His Ser 1380
Pro Arg 1385	Gln Asp Asp Gly Gly	Asn Val Ser Ala Val	Ala Tyr His 1395
Ser Thr 1400	Thr Ser Leu Leu Ala	Ile Thr Glu Leu Phe	Glu Lys Tyr 1410
Thr Gln 1415	Thr Leu Gly Asn Thr	Thr Ala Leu Glu Thr	Thr Leu Leu 1425
Ser Lys 1430	Ser Gln Glu Ser Thr	Thr Val Lys Arg Ala	Ser Asp Thr 1440
Pro Pro 1445	Pro Leu Leu Ser Ser	Gly Ala Pro Pro Val	Pro Thr Pro 1455

<210> 14
 <211> 2586
 <212> PRT
 <213> Homo sapiens

<400> 14

Met Lys Val Lys Gly Arg Gly Ile Thr Cys Leu Leu Val Ser Phe Ala
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 Val Ile Cys Leu Val Ala Thr Pro Gly Gly Lys Ala Cys Pro Arg Arg
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 Cys Ala Cys Tyr Met Pro Thr Glu Val His Cys Thr Phe Arg Tyr Leu
 35 40 45
 Thr Ser Ile Pro Asp Ser Ile Pro Pro Asn Val Glu Arg Ile Asn Leu
 50 55 60
 Gly Tyr Asn Ser Leu Val Arg Leu Met Glu Thr Asp Phe Ser Gly Leu
 65 70 75 80
 Thr Lys Leu Glu Leu Leu Met Leu His Ser Asn Gly Ile His Thr Ile
 85 90 95
 Pro Asp Lys Thr Phe Ser Asp Leu Gln Ala Leu Gln Val Leu Lys Met
 100 105 110
 Ser Tyr Asn Lys Val Arg Lys Leu Gln Lys Asp Thr Phe Tyr Gly Leu
 115 120 125
 Arg Ser Leu Thr Arg Leu His Met Asp His Asn Asn Ile Glu Phe Ile
 130 135 140
 Asn Pro Glu Val Phe Tyr Gly Leu Asn Phe Leu Arg Leu Val His Leu
 145 150 155 160
 Glu Gly Asn Gln Leu Thr Lys Leu His Pro Asp Thr Phe Val Ser Leu
 165 170 175
 Ser Tyr Leu Gln Ile Phe Lys Ile Ser Phe Ile Lys Phe Leu Tyr Leu
 180 185 190
 Ser Asp Asn Phe Leu Thr Ser Leu Pro Gln Glu Met Val Ser Tyr Met
 195 200 205
 Pro Asp Leu Asp Ser Leu Tyr Leu His Gly Asn Pro Trp Thr Cys Asp
 210 215 220
 Cys His Leu Lys Trp Leu Ser Asp Trp Ile Gln Pro Asp Val Ile Lys
 225 230 235 240
 Cys Lys Lys Asp Arg Ser Pro Ser Ser Ala Gln Gln Cys Pro Leu Cys
 245 250 255
 Met Asn Pro Arg Thr Ser Lys Gly Lys Pro Leu Ala Met Val Ser Ala

865				870				875				880					
Gln	Gly	Thr	Thr	Asn	Gln	His	Ser	Ser	Thr	Val	Phe	Pro	Leu	Leu	Leu		
				885					890					895			
Gly	Ala	Thr	Glu	Phe	Gln	Asp	Ser	Asp	Gln	Met	Gly	Arg	Gly	Arg	Glu		
				900					905					910			
His	Phe	Gln	Ser	Arg	Pro	Pro	Ile	Thr	Val	Arg	Thr	Met	Ile	Lys	Asp		
				915					920					925			
Val	Asn	Val	Lys	Met	Leu	Ser	Ser	Thr	Thr	Asn	Lys	Leu	Leu	Leu	Glu		
				930					935					940			
Ser	Val	Asn	Thr	Thr	Asn	Ser	His	Gln	Thr	Ser	Val	Arg	Glu	Val	Ser		
945					950					955					960		
Glu	Pro	Arg	His	Asn	His	Phe	Tyr	Ser	His	Thr	Thr	Gln	Ile	Leu	Ser		
				965					970					975			
Thr	Ser	Thr	Phe	Pro	Ser	Asp	Pro	His	Thr	Ala	Ala	His	Ser	Gln	Phe		
				980					985					990			
Pro	Ile	Pro	Arg	Asn	Ser	Thr	Val	Asn	Ile	Pro	Leu	Phe	Arg	Arg	Phe		
				995					1000					1005			
Gly	Arg	Gln	Arg	Lys	Ile	Gly	Gly	Arg	Gly	Arg	Ile	Ile	Ser	Pro			
				1010					1015					1020			
Tyr	Arg	Thr	Pro	Val	Leu	Arg	Arg	His	Arg	Tyr	Ser	Ile	Phe	Arg			
				1025					1030					1035			
Ser	Thr	Thr	Arg	Gly	Ser	Ser	Glu	Lys	Ser	Thr	Thr	Ala	Phe	Ser			
				1040					1045					1050			
Ala	Thr	Val	Leu	Asn	Val	Thr	Cys	Leu	Ser	Cys	Leu	Pro	Arg	Glu			
				1055					1060					1065			
Arg	Leu	Thr	Thr	Ala	Thr	Ala	Ala	Leu	Ser	Phe	Pro	Ser	Ala	Ala			
				1070					1075					1080			
Pro	Ile	Thr	Phe	Pro	Lys	Ala	Asp	Ile	Ala	Arg	Val	Pro	Ser	Glu			
				1085					1090					1095			
Glu	Ser	Thr	Thr	Leu	Val	Gln	Asn	Pro	Leu	Leu	Leu	Leu	Glu	Asn			
				1100					1105					1110			
Lys	Pro	Ser	Val	Glu	Lys	Thr	Thr	Pro	Thr	Ile	Lys	Tyr	Phe	Arg			
				1115					1120					1125			
Thr	Glu	Ile	Ser	Gln	Val	Thr	Pro	Thr	Gly	Ala	Val	Met	Thr	Tyr			
				1130					1135					1140			
Ala	Pro	Thr	Ser	Ile	Pro	Met	Glu	Lys	Thr	His	Lys	Val	Asn	Ala			
				1145					1150					1155			
Ser	Tyr	Pro	Arg	Val	Ser	Ser	Thr	Asn	Glu	Ala	Lys	Arg	Asp	Ser			

2585

<210> 15
 <211> 236
 <212> PRT
 <213> Mus musculus

<220>
 <221> misc_feature
 <222> (1)..(236)
 <223> 'x' can be any amino acid

<400> 15

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